most of the pines. It also returns quickly to the soil the potash and other mineral substances accumulated in fallen leaves, but drives off the inorganic matter which would otherwise make the soil more nitrogenous. It may destroy some insects which would otherwise injure the trees. . . . (It) does very little harm to the longleaf pine after that reaches the age of four or five years.

"It can be safely asserted that there is not and never has been a longleaf pine forest . . . which did not show evidences of fire, such as charred bark near the bases of the trees; and furthermore, that if it were possible to prevent forest fires absolutely the longleaf pine—our most useful tree—would soon become extinct. For where the herbage has not been burned most of the pine seeds lodge in the grass and fail to germinate, and if the oaks and other hardwoods were allowed to grow densely they would prevent the growth of the pine, which cannot stand much shade, especially when young.

"At the present time most of the fires in the pine woods are set purposely, to burn off the dead grass and improve the grazing. This practice has been repeatedly denounced by persons who have spent most of their lives outside of longleaf pine regions, but really the only just criticism of it that can be made is that it is done too often."

There are two other parts of this report contemplated: "Part II, a catalogue of the trees and shrubs, with their distribution and economic properties; Part III, the medicinal plants, the weeds and useful or noxious plants not included in the preceding parts."

Samuel J. Record

Yale Forest School

PROCEEDINGS OF THE CLUB

December 9, 1913

The first regular meeting for the month of December was held on the ninth at the Museum of Natural History at 8:15 P.M. President Burgess presided. Sixteen persons were present. The minutes of November 26 were read and approved.

The announced program for the evening was an illustrated

lecture by Dr. M. T. Cook on "Peach Yellows and Methods of their Control." Professor Cook briefly traced the history of the disease from the earliest times to the present. He showed that whereas the problem was formerly considered a trivial matter it is now recognized as one of the most profound subjects which presents itself to the plant pathologist. The peach yellows and a closely related disease, little peach, are of considerable menace to the peach growing industry in the east. This is due to the fact that these diseases cannot be detected in their earlier stages and consequently nurserymen and growers are continually propagating by budding from infected stock.

A most peculiar phenomenon is the appearance of the external morphological symptoms of peach yellows in trees that have been injured, girdled, or neglected. The leaves become leathery, curl, and usually fold at the midrib. The blossoms appear earlier and likewise the fruit. The infected peach is generally speckled and insipid. The one character which enables the horticulturalist to make certain the presence of peach yellows is the witches-broom effect of the twigs in winter. This character is absent from trees suffering from injury or little peach disease.

At present there is no cure for peach yellows or little peach, and the only remedial measures taken to prevent the spread of the diseases are quarantine, and the destruction of infected trees. Dr. Cook hopes that within a short time he will be able to give the nurserymen and growers simple tests for detecting the diseases in their earlier stages.

Meeting adjourned.

MICHAEL LEVINE,
Secretary pro tem.

NEWS ITEMS

Dr. Britton, accompanied by Mrs. Britton, Mr. John F. Cowell, Director of the Buffalo Botanical Garden and Mr. Frank E. Lutz of the American Museum of Natural History, sailed for Porto Rico on February 7 to continue studies of the botany and zoölogy of that island in coöperation with the New York Academy of Sciences. The party will make Mayagüez a base of operations